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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,569	11/09/2000	Makiko Endo	35.C14920	2291

5514 7590 05/26/2005

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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SCHWARTZ, PAMELA R

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/708,569

Applicant(s)

ENDO ET AL.

Examiner

Pamela R. Schwartz

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3/22/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23,24,27 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23,24,27 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Art Unit: 1774

1. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of U.S.

Patent No. 6,460,989. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the patent, directed to an ink set, recite the inclusion of coloring material and fine particles which adsorb the coloring material in a monomolecular state. See claims 1, 3, 4, and 10-12. Since the ink set would be used to make the instantly claimed invention, and the particulars of how to make the claimed imaged article are recited by the patent claims, instantly claimed invention is obvious therefrom. Claims 23 and 27 were previously excluded from the obviousness double patenting claims but are now included as either inherent results of the disclosed process or in the case of claim 23, an obvious optimization thereof to obtain and known and desired result of color saturation.

2. Claims 23, 24, 27 and 29-32 are is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,659,601. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented recording method discloses an ink and a liquid composition, the liquid composition containing fine particles, wherein the coloring material is adsorbed on the surfaces of the fine particles in a monomolecular state such that the particles aggregate to each other and with the surfaces of the particles being charges with a polarity opposite to that of the ink. See claims 1,12 and 16. Since the recording method would be used to make the instantly

Art Unit: 1774

claimed invention, and the particulars of how to make the claimed imaged article are recited by the patent claims, instantly claimed invention is obvious therefrom.

3. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-40 of U.S. Patent No. 6,517,199. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent discloses a liquid composition for forming a colored area of an image on a medium by application of charged ink containing a coloring material wherein the aqueous ink composition contains fine particles that adsorb the coloring material of the ink a monomolecular state. See claims 2, 6, and 8. Since the aqueous liquid composition would be used to make the instantly claimed invention, and the particulars of how to make the claimed imaged article are recited by the patent claims, instantly claimed invention is obvious therefrom.

4. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37 of U.S. Patent No. 6,719,420. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims disclose a liquid composition for forming a colored portion of an image on a medium by application of charged particles and an oppositely charged colorant wherein the particles adsorb the colorant in what is inherently a monomolecular state (due to the method of formation) along with an ink set and method of use. Since the aqueous liquid composition would be used to make the instantly claimed invention, and the particulars of how to make the

Art Unit: 1774

claimed imaged article are recited by the patent claims, instantly claimed invention is obvious therefrom.

5. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6,729,718. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims disclose a recording method for forming the instantly claimed imaged medium including the particulars of how to make the claimed imaged article, the instantly claimed invention is obvious therefrom.

6. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,821,328. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims disclose a liquid composition for forming a colored portion of an image on a medium by application of charged particles and an oppositely charged colorant wherein the particles adsorb the colorant in what is inherently a monomolecular state (due to the method of formation) along with an ink set and method of use. Since the aqueous liquid composition would be used to make the instantly claimed invention, and the particulars of how to make the claimed imaged article are recited by the patent claims, the instantly claimed invention is obvious therefrom.

7. Claims 23, 24, 27 and 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of U.S.

Art Unit: 1774

Patent No. 6,746,114. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims disclose an ink set for forming a colored portion of an image on a medium by application of charged particles and an oppositely charged colorant wherein the particles adsorb the colorant in what is inherently a monomolecular state (due to the method of formation) along with a method of use. Since the ink set would be used to make the instantly claimed invention, and the particulars of how to make the claimed imaged article are recited by the patent claims, the instantly claimed invention is obvious therefrom.

8. Claims 23, 24 and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaima et al. (6,527,843) for reasons of record and for reasons given below. Zaima et al. (6,527,843) disclose fine colored particles for use in ink jet ink. The colored particles may be formed by adsorbing dye on the surface of oppositely charged metal oxide particles. This may be accomplished by incorporating the dye into a dispersion of the metal oxide. One or more dyes may be used. The size of the particles is 1 to 500 nm (col. 4, lines 28-34). See col. 4, lines 50 to col. 5, line 27, col. 5, lines 58-62, and col. 6, lines 4-6. The particles are dispersed in solvent to produce an ink jet ink and are applied by an ink jet recording method to a substrate which may be regular paper (see col. 9, lines 40-67). The reference briefly mentions properties of saturation (col. 4, lines 40-42) and zeta-potential, but does not disclose values. Based upon the recognition of these properties in the art, it would have been obvious to one of ordinary skill in the art to optimize these properties in order to obtain desired printing results.

Art Unit: 1774

9. Applicant's arguments filed 3/22/05 have been fully considered but they are not persuasive. With respect to Zaima et al. "[a]pplicants submit that the fine particles of Zaima et al. will penetrate deeply into the recording medium and the obtained image cannot exhibit the excellent coloring properties of the present invention." To support this statement, applicants rely upon a recitation of the reference that the thickness of the printed letters using the ink of the invention was comparable to that of the original ink of the printer. It is unclear how this statement supports applicants' conclusion quoted above that the ink will penetrate deeply into the recording medium and no further explanation has been provided.

Applicants are attempting to rely on a process limitation for patentability of their article claims. This process limitation only lends patentability to the article claims if it renders the article structurally distinct from the prior art. While this is apparent in some cases, in other cases, such as the instant case, it is not apparent. Since the examiner is not in a position to test the affect of the process on the article, the burden is on applicants to demonstrate that the process set forth in the claims renders the article structurally distinct from the prior art article. The examiner is not asserting that the process of making the article of Zaima et al. is the same as the process instantly claimed, but the materials and method are similar enough that it is not apparent that the difference in process steps results in an article that is structurally distinct from the prior art.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1774

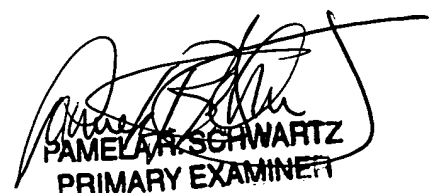
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz  
May 20, 2005



PAMELA A. SCHWARTZ  
PRIMARY EXAMINER